REMARKS

Claims 1-20 are pending. New Claims 11-20 find support in the original claims and in the specification as follows. Independent Claim 11 finds support in Claim 1 and in the specification at pages 4-8. The temperature ranges in Claims 11 and 12 find support in original Claims 1 and 2. Charge transporting materials, such as those in Claims 13-16, are described on page 4, line 20-page 5, line 14. The solvents in Claims 17-19 are described in the specification starting at page 7, line 21. The activated clay of Claim 20 is described on page 7, lines 4-8. Accordingly, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Kopec for the courteous and helpful interview of September 2, 2003. The comparative experimental data in Tables 1-1 and 1-2 on pages 36 and 39 of the specification were discussed. To address the prior art rejection, the Applicants were encouraged to point out the superior properties of the materials produced by the claimed methods, such as improved sensitivity and reduced residual potential, as shown in these tables. The Applicants were also encouraged to provide copies of the documents cited in the specification on an information disclosure statement. This information disclosure statement was filed on November 4, 2003. As discussed, the Applicants discuss the superior results shown by the experimental data in Tables 1-1 and 1-2 below. Accordingly, favorable consideration and allowance of this application is respectfully requested.

INFORMATION DISCLOSURE STATEMENT

As requested, the Applicants have provided a listing of the references cited in the specification in the Information Disclosure Statement previously filed on November 4, 2003.

RESTRICTION/ELECTION

The Applicants hereby confirm their election with traverse of Group I, Claims 1-8. The Applicants also confirm their election of the photoconductor species. Claims 1 and 2 are generic. Claims 6 and 7 fall within elected Group I, but were withdrawn as being directed to nonelected species (electroluminescent devices). Upon an indication of allowability for the generic claim, it is the Applicants' understanding that examination will be extended to nonelected species.

REJECTION - 35 U.S.C. § 103

Claims 1-4 and 7-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 11-76763, JP 11-84694 or JP 7-56365. The cited prior art does not render the claimed invention unpatentable, because it does not suggest selecting the treatment temperature range of 65°C to 200°C, nor suggest that selection of this temperature range would provide a product with superior properties, such as improved sensitivity and less residual potential.

Present independent Claims 1 and 11 require a treatment temperature ranging from 65°C to 200°C. JP 11-76763 and JP 11-84694 disclose methods involving a treatment temperature ranging from 20 to 60°C—see JP '763 paragraph [0008] and JP '694 paragraph [0009]. While these documents also indicate that treatment may be performed at a higher or lower temperature, there is no suggestion or reasonable expectation of success for obtaining an improved product by selecting a higher or lower temperature. JP 7-56365, paragraph [0005] describes a treatment temperature which is usually 20-200°C, but is preferably 20 to 60°C and Examples 1 and 2 of JP '365 disclose temperatures of 60°C and 25-30°C. Thus, none of the cited prior art suggests or provides a reasonable expectation of success for obtaining an improved product by selecting a temperature within the range 65°C to 200°C.

The Applicants' data in Tables 1-1 and 1-2 on pages 36 and 39 of the specification show the benefits of selecting a treatment temperature within the range 65°C to 200°C, e.g., that the photoconductors prepared with the charge-transporting material produced by the claimed method have improved sensitivity and less residual potential.

80°–130° examples 22

Table 1-1

Example and Comparative Example	V0 (-V)	Vr (-V)	E1/2 ($\mu J/cm^2$)
Example 1 CT 100	701	3	0.34
Comparative Example 150	692	24	0.39
Example 2 CT 100	651	1	0.29
Comparative Example 250	679	12	0.33
Example 3 CT 100	609	0	0.21
Comparative Example 350	582	5	0.26
Example 4 CT 100	650	3	0.29
Comparative Example 450	656	8	0.30
Example 5 CT 100	638	1	0.26
Comparative Example 550	601	19	0.30
Example 6 CT 100	595	0	0.19
Comparative Example 650	634	14	0.26
Example 7 CT 130	790	19	0.40
Comparative Example 750	752	59	0.56
Example 8 CT 130	655	0	0.27
Comparative Example 850	612	3	0.28
Example 9 CT 90	622	0	0.15
Comparative Example 946	514	32	0.21
Example 10 CT 90	666	0	0.24
Comparative Example 1046	631	28	0.38
Example 11 CT 90	800	14	0.43
Comparative Example 1146	771	63	0.60
Example 12 CT 90	649	3	0.37
Comparative Example 1246	678	39	0.58
Example 13 CT 90	587	0	0.22
Comparative Example 1346	580	3	0.24
Example 14 CT 80	591	0	0.28
Comparative Example 1450	603	3	0.29
Example 18 CT 80	620	8	0.33
Comparative Example 1840	584	11	0.35
Example 19 CT 65 u	614	0	0.30
Comparative Example 1940 u	610	9	0.32
Example 20 CT 65 u	592	0	0.28
Comparative Example 2040 u	593	4	0.28
Example 21 CT 90 u	542	1	0.22
Comparative Example 2140 u	548	8	0.23
Example 22 CT 90 u	561	0	0.21
Comparative Example 2250 u	570	33	0.40
Example 23 CT 90 u	504	0	0.29
Comparative Example 2350 u	490	3	0.29
Comparative Example 2450 u	693	21	0.38

For example, compare the substantially lower residual potential (Vr) and lower E1/2 (higher sensitivity) of Example 1 (treatment temperature 100°C) and Comparative Example 1 (treatment temperature 50°C). Compare also, Examples 2-7, etc. with Comparative Examples 2-7. The significance of the (Vr) and (E1/2) values are explained in the next paragraph.

The practical significance of "lower residual potential (Vr)" and "improved sensitivity (E1/2)" is as follows. (1) Lower residual potential (Vr). When it is necessary to remove a charge on a phosphor, it is expressed by "residual potential (Vr)" as to whether the charge is sufficiently removed or not. The smaller the residual potential (Vr) is, the more sufficiently the charge is removed. When the charge is sufficiently removed, the printed image becomes clear as a result.

(2) Improved sensitivity (E1/2). When light is applied to a phosphor, a charge is flown and neutralized, and the potential on the part where the light is applied is lower. At that time, the light exposure amount necessary for lowering the initial potential to half is defined as "half the decay exposure amount (E1/2)". The smaller the half exposure amount (E1/2) is, the smaller the light exposure amount necessary for lowering the surface potential is. As a result, the sensitivity is improved, and printing can be carried out with a smaller energy consumption amount. As shown in Tables 1-1 and 1-2, the superior values obtained by the present invention for (Vr) and (E1/2) are exemplified.

In view of the above remarks, the Applicants respectfully request that this rejection be withdrawn because the prior art does not suggest selecting the treatment temperature range of the invention, nor disclose or suggest the improved properties of the products produced by the claimed method by selecting this treatment temperature range.